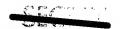
APPENDIX I



PRODUCTION OF A STATE STABILIZED STABILIZED STABILIZED

I Engineering Analysis of Parameters

A. Introduction

- 1. Pencremic camera principle applied to spin stabilized estellits.
- 2. Philosophy of parameter considerations related to simplicity, reliability and availability.
- 3. Reference to Rand Report for certain basic operational requirements and persuature.
- Vehicle considerations and recovery techniques (Wobble Analysis - Appendix).
- 5. Summary of parameters studied and discussed in following sections.

B. Exposure Considerations

- Brightness studies under the following conditions:
 - a. Veristions in latitude
 - b. Variations in time of year
 - c. Veriations in time of day
 - d. Verying brightness during a photographic pass
 - e. Establishing operating limits.

C. Systems Resolution Considerations

- 1. Operational parameters
- 2. Lens-Film resolution considerations
- 3. Exposure parameters from brightness studies (from Section B-1 above)
- i. Trade-off considerations for operational results in short-time program

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D. Camera Paremeters

- 1. Spin rate and cycling rate.
- 2. Varying exposure by programming.
- 3. Attitude sensing for camera operation.
- h. Medir recording.
- 5. Symebronization
- 6. Forward Motion Compensation
- 7. Recovery consette and capsule study
- 3. Torque reactions and balance.

E. Photogrammetric Considerations

- 1. Location accuracy
- 2. Distortion considerations
- 3. Discussion of required inputs from camera and/or vehicles
- 4. Requirements for ground support equipment

F. Test Equipment Striles

- 1. Requirements of parameters to be checked
- 2. Recommended techniques for accomplishing check-out and test
- 3. Design philosophy for test and check-out equipment, including simulated operating inputs.

II Design Considerations

- A. Schematic Functional Diagram
 - 1. Description of camera operation



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- B. Presentation of Design Layouts
 - 1. Camera configuration in vehicle
 - 2. Cassette design and recovery parameters
 - 3. Camera design and discussion.
- C. General Conclusions